FALCON REFINERY

Site Information

The Falcon Refinery a.k.a. National Oil Recovery Corporation (NORCO) site (the "site") consists of a refinery that has operated intermittently since 1980 and is currently inactive. When in operation, the refinery operated at a 40,000 barrels per day capacity with primary products consisting of naphtha, jet fuel, kerosene, diesel, and fuel oil.

The site occupies approximately 104 acres in San Patricio County, Texas, and is located 1.7 miles southeast of State Highway 361 on FM 2725 at the northwest and southeast corners of FM 2725 and Bishop Road. Another portion of the site includes a dock facility on Redfish Bay where materials were transferred between barges and storage tanks. The site is bordered by wetlands to the northeast and southeast, residential areas to the north and southwest, an abandoned refinery to the northwest, and a construction company to the southwest.

The refinery processed material that consisted of not only crude oil but also contained hazardous substances as defined by 40 CFR Part 261.32. In a Notification of Hazardous Waste Activity, signed on October 20, 1980 by Mr. Eugene W. Hodge, Vice President of UNI Refining, Inc., four hazardous wastes from specific sources were listed: K048, K049, K050, and K051. Of these sources, the listed hazardous waste K051, API separator sludge from the petroleum refining industry based on the toxicity of the sludge, was documented in an inspection report to have been deposited inside the walls of a tank berm. Other hazardous substances at the site include: (1) vinyl acetate detected inside tanks from a EPA Criminal Investigation Division (CID) criminal investigation and a TNRCC Region 14 sampling event, (2) the chromium detected in deposited cooling tower sludges, (3) Texas Railroad Commission documentation of not normally constituents detected in a pipeline spill, and (4) untreated wastewater release inside tank berms.

The history of this site is marked by the numerous complaints from nearby residents as early as 1978 concerning the construction of the facility along Redfish Bay, odors allegedly produced from processing impure crude in 1985-86, and odors associated with a spill in January 2000.

The site (either whole or in part) has been owned, leased and/or operated under several different companies. The Oil and Gas Company of Texas, Inc. applied for one of the first air permits for the site in 1977. A deed search revealed that the facility was leased to UNI Refining, Inc. from the UNI International Corporation and the UNI Pipeline, Inc. for seven years, 1979-1986. UNI Refining Co. obtained an air permit in 1979 and commenced construction of the facility in April 1980. In March 1981 UNI Oil, Inc., the parent corporation of UNI Refining Company and UNI Pipeline Company, was sold to new owners operating in the names of Texas Independent Oil Corporation and Texas Independent Refining. In 1983 the refinery was sold and operated under the name MidGulf Energy, Inc.

The Falcon Refining Company (FRC) purchased the site from Texas Independent Refining facility and began operating in late December 1985. On March 12, 1986, an inspection conducted by the Texas Water Commission revealed that the company had disposed of cooling

tower sludges on-site and untreated wastewater in tankage that was discharged into sandy, unlined containment structures. The sludges were sampled and revealed a total chromium level of 8,020 mg/kg. In 1986 production at the refinery once again ceased, Falcon Refining, Inc. declared bankruptcy, and the facility came under the ownership of American Energy Leasing, Inc. In May 1990 Impexco of Texas, Inc. acquired the site from American Energy Leasing, Inc.

National Oil Recovery Corporation (NORCO) gained title to the refinery in December 1990 from Impexco of Texas, Inc. In June 1991, NORCO acquired the dock facility from the Sun Operating Limited Partnership. In the mid-90s MJP Resources, Inc. began leasing/operating the tanks on the northwest corner of the FM 2725 and Bishop Road and the dock facility. In 1998, Pi Energy Corporation acquired 2.5 acres of the dock facility from NORCO.

Formal enforcement was brought against Falcon Refining on April 7, 1986, with the issuance of a Notice of Violation on Water Quality Permit 02142. The enforcement case was closed by TNRCC on December 14, 1992 with the current owner, NORCO.

On November 15, 1995, a spill was reported north of Bishop Road adjacent to the Brown & Root Facility in the wetlands. The spill occurred when Mike Ward of MJP Resources, Inc. performed an hydrostatic test of a pipeline, prior to bringing the line back into service. The pipeline extends from the main facility to the dock facility. Approximately less than eight barrels of "crude oil" were spilled. The spill occurred when Mike Ward of MJP Resources, Inc. performed an hydrostatic test of a pipeline, prior to bringing the line back into service. The pipeline extends from the main facility to the dock facility. Approximately less than eight barrels of "crude oil" were spilled. Two contaminated soil piles and two roll-off containers, containing regulated waste associated with the spill resulted from the waste removal activity. Analyses of the February 7, 1996 samples (collected from one roll-off and liquid material leaking from the roll-off) indicated elevated levels of the following constituents: tetrachloroethene, 2-methylnapthalene, phenanthrene, toluene, and total xylenes. According to Mr. Bernie Eickel of the Texas Railroad Commission, the sample analyses indicated the presence of substances other than crude oil. According to Craig Santana with Alamo Petroleum Exchange (APE), Ward hired APE to clean up the MJP Dock pipeline spill and to place the liquids cleaned up from the spill in two tanks at NORCO.

The EPA CID of the Houston Area Office conducted a criminal investigation from January 1996 until August 2000 on the activities at Gulf Conservation Corporation (GCC) and MJP Resources, Inc. who were operating the NORCO facility. Specifically, the investigation was over a vinyl acetate slop stream delivered to GCC. According to Ronald Cady, Louisiana Department of Environmental Quality Regional Hazardous Waste Coordinator, and Brian Lynch, CID, this stream consisted of odorless mineral spirits (OMS) that were used as a carrier for vinyl acetate in the production of polyethylene at Westlake Polymers in Sulphur, Louisiana. According to Mike Ward, GCC owner Jimmy Dupnik stored material from GCC in at least one tank on the NORCO facility. Samples were collected by the CID in February 1996 from the two tanks on the NORCO facility. The liquid samples collected revealed high concentrations of vinyl acetate in two tanks; 1,360,000 ug/L and 36,600,000 ug/L. The result of the case was that it was declined to be prosecuted by the United State Attorney office, Southern District, Texas.

On January 4, 2000, TNRCC Region 14 inspectors completed a compliance inspection at the site pertaining to the air quality requirements for permitted tanks. The tank in the naphtha stabilizer unit was observed to be leaking from a valve between the sight glass and the tank. Based upon the flow rate of the leak, the volume of the spill was determined to be at least 220 gallons of industrial waste.

Because this site is inactive, the site is not on a set inspection schedule. An air permit inspection takes place as needed in which the air inspector walks the tank farms and the process area.

Contaminants of Concern

In May 2000, the TNRCC Superfund Site Discovery and Assessment Program (SSDAP) conducted sampling activities at the Falcon Refinery site. The following hazardous substances were documented on the Falcon Refinery property and their right-of-way in soil samples at elevated concentrations that require further investigation:

Hazardous Substance	Highest Concentration Detected	Highest Background Concentration
Cyclohexane	1500 ug/kg	ND
Toluene	1700 ug/kg	ND
Ethylbenzene	2000 ug/kg	ND
Xylenes (total)	6700 ug/kg	ND
Fluoranthene	470 ug/kg	ND
Pyrene	3900 ug/kg	ND
Benzo(a)anthracene	370 ug/kg	ND
Chrysene	8500 ug/kg	ND
Benzo(b)fluoranthene	990 ug/kg	ND
Benzo(k)fluoranthene	600 ug/kg	ND
Benzo(a)pyrene	740 ug/kg	ND
Indeno(1,2,3-cd)pyrene	560 ug/kg	ND
Benzo(g,h,i)perylene	610 ug/kg	ND
Arsenic	23.3 mg/kg	1.9 mg/kg
Cadmium	1.3 mg/kg	ND
Chromium	83.2 mg/kg	2.1 mg/kg
Copper	75.6 mg/kg	1.7 mg/kg
Lead	220 mg/kg	5.6 mg/kg
Manganese	735 mg/kg	42.8 mg/kg

Hazardous Substance	Highest Concentration Detected	Highest Background Concentration
Mercury	1.2 mg/kg	0.065 mg/kg
Nickel	57.5 mg/kg	1.9 mg/kg
Potassium	1480 mg/kg	319 mg/kg
Selenium	2.5 mg/kg	0.57 mg/kg
Sodium	7840 mg/kg	242 mg/kg
Thallium	10.5 mg/kg	ND
Zinc	291 mg/kg	32.7 mg/kg

ND = Not detected above the sample quantitation limit.

Media Affected

Sediment in the Redfish Bay fishery and contiguous wetlands and soils on-site are the media affected.

Threatened Targets

The surface water migration pathway is the main target of concern for this site. The surface water migration pathway evaluates threats resulting from releases or potential releases of hazardous substances to surface water bodies. There are two components to this pathway, overland flow and ground water to surface water. For each component, three threats are evaluated: drinking water threat, human food chain threat, and environmental threat. Sediment, surface water, and fish tissue samples may be collected to evaluate these threats. The component evaluated for the site is overland flow; the threats evaluated are human food chain and environmental; and sediment samples were collected.

The site is located in the San Antonio-Nueces Coastal Basin. The site lies approximately five feet above sea level and drains into the on-site wetlands. The topography of the site is gently sloping to the southeast as revealed by the Port Ingleside, Texas, U.S.G.S. topographic map. One route for hazardous substances to be found in the surface water pathway is to enter the wetlands along the southeastern section of the refinery. A culvert connects the on-site, palustrine/estuarine wetlands to off-site estuarine wetlands. Another route for hazardous substance migration is from the dock facility to Redfish Bay. As this was the location from which materials were transferred from barges, spills may have occurred at that location.

Actual Contamination

The Falcon Refinery dock facility is located on the Redfish Bay/Intracoastal Waterway. The Redfish Bay/Intracoastal Waterway is a documented fishery. Sediment samples collected in Redfish Bay during the May 2000 sampling event documented a release to Redfish Bay and in an estuarine wetland area. The following hazardous substances were documented in sediments

obtained in Redfish Bay and nearby wetlands at elevated concentrations that require further investigation:

Hazardous Substance	Highest Concentration Detected	Highest Background Concentration
Fluoranthene	8300 ug/kg	Not Detected
Pyrene	10000 ug/kg	Not Detected
Benzo(a)anthracene	6000 ug/kg	Not Detected
Chrysene	6600 ug/kg	Not Detected
Benzo(b)fluoranthene	4000 ug/kg	Not Detected
Benzo(k)fluoranthene	3000 ug/kg	Not Detected
Benzo(a)pyrene	3700 ug/kg	Not Detected
Indeno(1,2,3-cd)pyrene	1400 ug/kg	Not Detected
Benzo(g,h,i)perylene	3700 ug/kg	Not Detected
Barium	1940 mg/kg	104 mg/kg
Manganese	1190 mg/kg	250 mg/kg
Mercury	0.27 mg/kg	Not Detected

The area in and around the refinery and the adjacent wetlands is habitat for Federal and Stated designated endangered or threatened species as designated by Texas Parks and Wildlife Department's (TPWD) Wildlife Diversity Program staff and confirmed by Mr. Beau Hardegree of the TPWD Lower Coast Conservation Assessment Program. The habitat exists for the following species:

Habitat Known to Support Endangered/Threatened Species					
	Federal		State		
Location	Endangered	Threatened	Endangered	Threatened	Species of Concern
On/Adjacent Wetlands	Brown Pelican		Brown Pelican	Reddish Egrets	
Redfish Bay	Brown Pelican	Green Sea Turtle	Brown Pelican	Reddish Egrets	Texas Pipefish
	Kemp's Ridley Sea Turtle	Piping Plover	Kemp's Ridley Sea Turtle		

Potential Contamination

Sediment samples collected in Redfish Bay documented a release of hazardous substances. Migration of these contaminants via a surface water pathway has the potential to impact the following sensitive environments along an off-site migration route:

- Wetland located in all directions of tidal influence in the Intracoastal Waterway
- Corpus Christi Bay (Water Quality Segment 2481) fishery and oyster waters
- Aransas Bay (Water Quality Segment 2471) fishery and shellfish waters
- Habitat areas for Federal and State Listed Endangered and Threatened Species

Potentially Responsible Parties (PRPs)

Past Landowners/Operators

- Falcon Refining Company, a company based in Louisiana, filed for bankruptcy under Chapter 7 on August 6, 1986. The case was closed in the bankruptcy court on January 30, 1990.

- American Energy Leasing, Inc. filed for bankruptcy under Chapter 7 in October 2, 1989. Records regarding the result of the filing were not available for review.

- Pi Energy Corporation filed for bankruptcy under Chapter 11 on October 19, 1998. Their Plan of Reorganization was confirmed by court order on May 2, 2000.

Current Landowners/Operators

On March 17, 2000 and March 20, 2001, NORCO and Mr. Richard Bergner, authorized attorney for NORCO, received notice that the TNRCC and EPA would be investigating the property pursuant to the Comprehensive Environmental Response Compensation and Liability Act of 1980 (CERCLA) as amended, 42 U.S.C. 9601 et seq., to determine if there is a "release or substantial threat of release into the environment of any pollutant or contaminant which may present an imminent and substantial danger to the public health or welfare." Authority to conduct this investigation was also provided as contained in Section 104(e) of CERCLA, Section 308 of the Clean Water Act, Section 361.182 of the Texas Solid Waste Disposal Act, and Sections 26.014 and 26.015 of the TEXAS WATER CODE.

On April 4, 2000, the TNRCC received a letter from Mr. Bergner in which he requested information on the TNRCC's statutory authority to access the site and conduct the investigation. Ms. Caroline Sweeney, a TNRCC attorney, responded in a letter dated April 20, 2000, in which she restated the statutory authority and notified NORCO that the matter was referred to the Office of the Attorney General. In April 2000, this issue was referred to the Attorney General's Office and another access agreement was sent to NORCO. On May 4, 2000, Mr. Solfred Maizus, President of NORCO, signed an access agreement allowing TNRCC and their authorized representatives continued access to their property for the purposes of an Expanded Site Inspection (ESI) investigation contracted to the TNRCC by EPA under CERCLA.

A formal enforcement case is pending on violations involving a naphtha stabilizer unit spill and an aboveground storage tank number seven in January 2000. The enforcement case includes less than one percent of the total site area and does not include adjacent wetlands, or Redfish Bay sediments near the dock facility. The Executive Director's Preliminary Report and Petition (EDPRP) regarding this enforcement case was filed with the Chief Clerk's Office (CCO) on October 26, 2000. NORCO received it on November 1, 2000, and filed their answer of denial

and request for a preliminary hearing on or about November 19, 2000. The Executive Director has offered a proposed Agreed Order, which was sent to NORCO on June 12, 2001. The referral letter was filed with State Office of Administrative Hearings (SOAH) and the CCO on September 4, 2001. NORCO has not accepted the settlement offer. The next step is for the parties to have a preliminary hearing where they will meet before a SOAH judge and work out the pre-trial schedule of events that will take place before the evidentiary hearing. A preliminary hearing date has been scheduled for December 6, 2001.

At the preliminary hearing, the parties will set the discovery schedule. Discovery is the opportunity for the parties to exchange questions and information in order to focus the case on the disputed issues. This stage may take several months to resolve. If the parties have not reached a settlement by this point, there will be an evidentiary hearing before a SOAH Administrative Law Judge (ALJ). The ALJ will issue his/her written ruling (called a Proposal For Decision or PFD) within approximately 60 days after the evidentiary hearing. The parties will have an opportunity to file exceptions (written objections to the content of the PFD). Finally, the PFD and any exceptions will be considered by the Commissioners at Agenda. If this case proceeds through the entire process described above, the case should be considered by the Commissioners around Summer 2002.

National Priorities List (NPL) Status

The TNRCC was requested by the U.S. Environmental Protection Agency (EPA) Region VI to conduct an ESI at the Falcon Refinery site. The purpose of the ESI was to document release(s) or potential release(s) of hazardous substances from identifiable sources which may have migrated off-site, and to determine if the site is eligible for proposal to the NPL.

The findings of this ESI revealed releases of fluoranthene, pyrene, benzo(a)anthracene, chrysene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, benzo(g,h,i) perylene, dibenz(a,h)anthracene, barium, manganese, and mercury into the nearby wetlands, the Redfish Bay fishery, and potential habitat areas for State and Federal threatened or endangered species. The preliminary site Hazard Ranking System (HRS) score is 50.0. Under the federal Superfund Program a site is eligible for NPL consideration with a site HRS score of 28.5 or greater, therefore the Falcon Refinery site is eligible for the proposal to the NPL.